

REMARKS

Applicants respectfully request reconsideration of this application as amended. Claims 1-54 are pending in the application. No claim has been canceled. Claims 1, 3, and 5 have been amended. No new matter has been added.

Claims 1-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,640,413 of Ichihara (“Ichihara”) in view of U.S. Patent No. 6,449,630 of Bao (“Bao”). It is respectfully submitted that claims 1-54 include limitations that are not disclosed or suggested by the cited references. Specifically, independent claim 1 as amended recites as follows:

1. A method for communicating with at least one subscriber, the method comprising:
transmitting orthogonal frequency domain multiplexing (OFDM) signals to the at least one subscriber; and
receiving direct-sequence spread spectrum (DSSS) signals from the at least one subscriber in response to the OFDM signals.

(Emphasis added)

Independent claim 1 includes limitations of transmitting OFDM signals to one or more subscribers and receiving DSSS signals from the subscribers in response to the OFDM signals. That is, OFDM signals are transmitted in a downlink to the subscribers while DSSS signals are transmitted in an uplink from a subscriber (to a base station). It is respectfully submitted that these limitations are not disclosed or suggested by the cited references.

Rather, Ichihara utilizes TDMA protocols as an uplink and CDMA protocols as a downlink (see, Fig. 3 of Ichihara). However, both TDMA and CDMA are used to carry DSSS types of signals. None of the TDMA and CDMA protocols carries OFDM signals. In DSSS, modulation symbols are spread across the available bandwidth by a spreading sequence and then transmitted as shown in Figs. 4a-4g of Ichihara. In contrast, in OFDM as shown in Figs. 1A and

1B of the present application as claimed, a wide bandwidth is divided into multiple narrow-band sub-carriers, which are arranged in orthogonal with each other. It is respectfully submitted that there is no teaching or suggestions in Ichihara to use OFDM, particularly, using OFDM in the downlink while using DSSS in the uplink.

Bao is related to multiple function processing core for communication signals. Although Bao mentions the term of OFDM, it fails to disclose or suggest OFDM to be used in a configuration recited in independent claim 1.

In addition, there is no suggestion within the cited references to combine Ichihara with Bao. Given that Ichihara discloses a system that typically use DSSS types of signals (e.g., TDMA or CDMA), it lacks a reasonable expectation of success to combine Ichihara with Bao, particularly, using OFDM on the downlink while using DSSS on the uplink.

Even if Ichihara and Bao were combined, such a combination still lacks the limitations set forth above. Therefore, for the reasons discussed above, it is respectfully submitted that independent claim 1 is patentable over Ichihara in view of Bao.

Similarly, independent claims 3, 5, and 25 include limitations similar to those recited in claim 1. Thus, for the reasons similar to those discussed above, independent claims 3, 5, and 25 are patentable over the cited references.

Given that the rest of the claims depend from one of the above independent claims, at least for the reasons similar to those discussed above, it is respectfully submitted that the rest of the claims are patentable over the cited references.

Furthermore, it is respectfully submitted that none of the cited references discloses or suggests the specific configurations recited by the independent claims 5 and 25, as well as their respective dependent claims. In order to render a claim obvious, each and every limitations have to be taught by the cited references. It is respectfully submitted that neither Ichihara nor Bao,

individually or in combination, discloses the limitations recited in claims 5 and 25, as well as their respective dependent claims. Therefore, it is respectfully submitted that claims 1-54 are patentable over Ichihara in view of Bao.

In view of the foregoing, Applicant respectfully submits the present application is now in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call the undersigned attorney at (408) 720-8300.

Please charge Deposit Account No. 02-2666 for any shortage of fees in connection with this response.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date: _____

11/1/04



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